

1st ENTSO-E Public workshop on Network Code on Emergency and Restoration

Date: 9 July 2014

Time: 13h30 – 17h00

Place: ENTSO-E premises, Brussels

MINUTES

Programme:

No	Subject	Time	Lead
1.	Registration and lunch	12:30-13-30	
2.	Introduction and code process status	13:30 15 min.	Konstantin Staschus <i>ENTSO-E Secretary-General</i>
	Q & A		Workshop participants
3.	NC ER proposal of timetable and code contents	30 min.	Laurent Lamy <i>ENTSO-E Convenor of NC ER Drafting Team</i>
	Q & A		Workshop participants
4.	System defence plan principles - initial thoughts	60 min.	Tudal Loxq , NC ER Drafting Team member
	Q & A		Workshop participants
5.	Coffee break	10 min.	
6.	System Restoration plan design principles - initial thoughts	60 min.	Fabian Heus , NC ER Drafting Team member
	Q & A		Workshop participants
7.	Information exchange, communication tools and protocols	20 min.	Jens Jacobs , NC ER Drafting Team member
	Q & A		Workshop participants
8.	Conclusion Summary of workshop	15 min	Steve Heather <i>ENTSO-E System Operations Manager</i>
9.	End of Workshop	17:00	

1. Welcome -> Introduction and code process status

The ENTSO-E secretary general Konstantin Staschus welcomed the participants and presented the general drafting process of the network codes. The current status of all ENTSO-E network codes was reviewed and general links of NC ER with other operational, market and connection codes presented. Mr. Staschus stressed the importance of ENTSO-E commitment to close collaboration with stakeholders during the drafting process.

Stakeholders' general remarks:

- Not clear in the code how market participants will be informed when the system is in Emergency, Blackout and Restoration state. All market participants need to be informed at the same time in order not to distort the market.
- One of the issues of the code is Curtailment of Cross Zonal Allocated Capacities: ENTSO-E should consider this topic as a priority for this code. Question that appears is how is this to be decided between TSOs as probably market participants are not included in this TSO coordination process to decide if the capacities are to be curtailed. ENTSO-E should take also into consideration how to recover the costs to the consumers of TSO B that are supplied by TSO A.
- To clarify what is the best economic situation in restoration process and cost benefit analysis (CBA) regarding efficiency of restoration plans is expected to be further explained in the supporting document.
- SSE comments that the current provision of article Recovery of Costs doesn't include wording "economic" as suggested in previous ENTSO-E workshops. ENTSO-E responds that this article is in line with the latest development on this topic in other codes and agreed with ACER and EC.

To ease the reading of the codes, ENTSO-E has established an online glossary called EMR. This tool allows accessing to all definitions of specific terms used in the network codes.

<https://emr.entsoe.eu/glossary/bin/view/GlossaryCode/GlossaryIndex>

2. NC ER proposal of timetable and code contents

The convener of Drafting Team for NC ER, Laurent Lamy gave introduction to the network code, presented the code's objectives and the structure. The links with other connection and operational codes along with the NC ER timeline was also outlined. ENTSO-E will hold three public stakeholders workshops during the drafting process and a public consultation from October till December. Submission of the code to ACER will be in the end of March 2015.

3. System defence plan principles – initial thoughts

ENTSO-E presents general objectives of the chapter with further explanation of the main items.

System Defence Plan consists of measures to be undertaken to prevent the propagation or deterioration of an incident in the Transmission System, in order to avoid a widespread disturbance and Blackout State:

- Technical measures: System Protection Schemes such as Automatic Low Frequency Demand Disconnection Scheme;

- Organisational measures: procedures to be followed in different situations.

System Defence Plan requires coordination between:

- TSOs and
- TSO, DSOs and SGUs in its Responsibility Area.

Stakeholders' comments and questions:

- Q: Regarding specific grid users needs, do TSOs have an exact figure on % of amount in each TSO's responsibility area?
A: The "specific grid users" are defined at national level; each Member State shall define the amount.
- Q: Who will carry the costs of ensuring the implementation and availability measures that are needed to be available and implemented on DSOs and SGUs installations? NC RfG only applies to new installations only, but NC ER applies to a new and existing installations.
A: The cost recovery principles in NC ER will be the same than in other codes.
- Q: NC ER covers also type B users, are TSOs planning to go to the domestic level with provisions in the code?
A: NC ER has at least to consider them in the sense the TSO have to take into account their behaviour when designing their system defence plan. The code will use the capabilities required in the connection codes, but will not require new ones.
- Comment: Multiparty agreements have to be also a subject of NRA approval.
- Q: Article 10 (TSO coordination in Emergency situations) – why do you have for HVDC owner a special treatment?
A: To be fine-tuned in the next draft.
- Q: Article 10(1)/(2) – coordination with stakeholders is not involved here. Why can only TSOs decide on this?
A: The topic deals with support between TSOs.
- Q: Article 12 - Instead of term "pump", it would be better to use more general term as "Electrical energy storage systems" in order to have equal treatment for every service provider.
A: This will be modified in the next draft.
- Q: Will Low Frequency Demand Disconnection (LFDD) setting be harmonised on EU level?
A: ENTSO-E plans to harmonise low frequency demand disconnection at least on Synchronous Area level, this is to be developed in the code at a later stage after some detailed analysis.
- Q: Can you be more precise on aspects of "How" and "when" in voltage management provisions?
A: This will be further worked in the next draft.
- Comment: Term 'assistance' should be defined in the code.
- Comment: NRA approval would be needed for Assistance for active power, to cover the question of costs recovery.
- Q: Is there a market suspension predicted when the load is being shed?

A: The idea of ENTSO-E is to keep the market running as long as possible. More generally, this item will be further worked on, according to the Framework Guidelines for System Operation.

4. System Restoration plan design principles - initial thoughts

The objective of Restoration plan is to bring back the system from Emergency or Blackout State to Normal State, as soon and as efficient as possible. ENTSO-E presents general objectives of the chapter with further explanation of the provisions items include in the chapter.

Stakeholders' comments and questions:

- Comment: Term “Restoration plan” is not defined in the code.
- Q: Article 17(5) – (Design of Restoration plan) How to proceed if a TSO is unable to find black start providers in some areas?
A: ENTSO-E predicts that it would take a longer time to restore the system. Each TSO needs to define the numbers of Black Start units necessary, among the available ones. This issue must also be discussed with NRAs.
- Comment: In Article 17(5)(a) - wording “Minimize the impact of natural disaster” to be reconsidered as mainly such events occur due to the unnatural disaster.
A: This will be modified in the next draft.
- Comment: Article 17(9) – The concept of the Restoration Plan should be sent to SGUs and DSOs , in addition to the NRA.
A: The Restoration Plan is devised in coordination with SGU and DSO, thus they know it.
- Q: Who is responsible if fuel/gas is not available for black start units?
A: To be further discussed. According to the Framework Guidelines for System Operation, this is not clearly in the scope of NC ER.
- Q: What is the maximum blackout period that the system is designed for? Diesel generators that are running without any load?
A: To be further discussed.
- Comment: NC ER should also include islanding capabilities, not only black start capabilities.
A: This will be modified in the next draft.
- Q: The Resynchronisation leader should be decided under certain criteria that should be defined in the code, process to be under NRA approval. In case two TSOs don't agree, who is the leader? What are the criteria?
A: The selection of the Resynchronisation Leader will be precised in the next draft.
- Comment: Article 23(3)(a) (Inter-TSO Re-synchronisation Procedure) – to be more precise how Resynchronisation leader will contact the involved/concerned parties.
- Comment: Many details need to be worked on, regarding market suspension and restoration. This may affect credit worthiness
A: This item will be further worked, in the frame of the Framework Guidelines for System Operation. Regarding the settlement ENTSO-E stresses this item is also covered in NC CACM and FCA.

5. Information exchange, communication tools and protocols

Chapter Data Exchange of NC OS builds the basis for the Chapter “Information Exchange and Communication, Tools and Facilities” of the NC ER. The main objectives of this chapter are the following:

- Specify the relevant information needed to guarantee a sufficient and fast restoration
- Establish a common understanding between TSOs, DSOs and SGUs on the information to be exchanged and the communication channels used
- Set the minimum requirements for TSOs, DSOs and SGUs to guarantee the availability of communication at any time
- Set the minimum requirements for TSOs to guarantee the functionality and availability of control rooms in any system state at any time

Stakeholders’ comments:

- Not clear how a type B generators know that the Restoration procedures are invoked by TSO, to be specified how they are informed about these procedures.
- Comment: Article 25(2)(b) – It should clearly state that the provision only applies to contracted SGUs that offer the services.
A: To be integrated in the next draft.
- Comment: The communication is needed to know what is going on in the network; it should not be led to SGUs to figure this out by themselves.
- Q: Definition of SGU from the context of communication channels, do you refer to aggregated SGU or each individual SGU? It would be better to communicate directly with the power plants.
A: The communication channels should allow contact with parties who have an active role in system defence and restoration plans.
- Q: Article 26 (Communication channels) – Who are the relevant SGUs?
A: The next draft will precise “involved (or necessary) in the system defence plan and/or restoration plan” for sake of clarity.
- Q: Direct communication between TSO and SGU, to be defined when this communication is ongoing. Also in normal conditions?
A: NC ER will define requirements for Emergency and Restoration situations. Normal conditions are already covered by NC OS.
- Comment: If restoration goes via a dispatch room, it can take much longer time than if it communicated directly. In addition, in dispatch centre there is an issue not having the technical people / not 24x7 basis, which would be needed to restore the system, therefore it should be directly communicated.
- Comment: there should be further explanation in supporting document on what “direct/no public line” and “prioritised” mean.

6. Conclusion - Summary of the main issues discussed during the workshop

Konrad Von-Keyserlingk (European Commission) gave the following advice to all the participants:

- to solve potential issues before the code is submitted to EC, as this is more efficient and better for all involved parties.
- to add more rules for the processes in the code (as discussed in Florence forum).
- cross-border cooperation, the success factor of the code will be if the codes contributes to harmonisation.

Participants summarized what are the main items that still need to be included in the network code:

- Impact on the markets, as there could be a risk for production companies to get bankrupt because of the blackout in case this is not properly tackled in NC ER.
- Training provisions to be included in NC ER.